CLAIMS

WHAT IS CLAIMED IS:

1.   A computer-based assistance system for providing operational guidance of

commands to use a computer program, the assistance system comprising:

5   a command indicator for visually indicating to a user a portion of a display of the

computer program corresponding to a specific command to be executed; and

an interactive assistance object, responsive to the command indicator indicating

the specific command, for interacting with the user to guide the user in execution of the specific

command.

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2.   The assistance system of claim 1, wherein the interactive assistance object includes

an animation generator for generating an animated character to visually interact with and guide

the user to execute the indicated specific command.

15   3.   The assistance system of claim 2, wherein the animation generator generates a

plurality of animated characters to visually interact with each other to guide the user to execute

the indicated specific command.

4.   The assistance system of claim 1, wherein the interactive assistance object includes

20   a text message generator for displaying on the display a text message associated with the

indicated specific command to guide the user to execute the indicated specific command.

5.   The assistance system of claim 1, wherein the interactive assistance object includes an audio message generator for generating audio prompts to audibly interact with and guide the user to execute the indicated specific command.

5   6.   The assistance system of claim 1, wherein the interactive assistance object adaptively responds to user inputs to continually guide the user to execute the indicated specific command.

7.   The assistance system of claim 6, wherein the computer program operates with the 10   user through a graphic user interface (GUI), including movements and actuations of a current screen position indicator (CSPI); and

wherein the interactive assistance object adaptively responds to movement of the CSPI on the GUI to guide the user to execute the indicated specific command.

15   8.   The assistance system of claim 7, wherein the CSPI is a cursor.

9.   The assistance system of claim 8, wherein the CSPI moves in response to corresponding movements of a mouse device.

20   10.   The assistance system of claim 9, wherein the interactive assistance object responds to the cursor movement by prompting the user to move the mouse and thereby the cursor to the indicated specific command displayed on the GUI.

11.   The assistance system of claim 1, wherein the command indicator visually indicates the portion of the display by focusing the attention of the user to a predetermined region of the display surrounding the specific command.

5   12.   The assistance system of claim 11, wherein the focusing includes overlaying a rectangular box as the predetermined region on the display of the computer program with the box surrounding the specific command of the computer program.

13.   The assistance system of claim 11, wherein the computer program represents

10   commands by corresponding actuatable regions on the display; and

wherein the focusing includes providing a substantially distinct appearance of the indicated portion of the display, with the distinct appearance being different from the appearance of the actuatable region associated with the displayed specific command.

15   14.   The assistance system of claim 13, wherein the appearance of the indicated portion includes a displayed color.

15.   The assistance system of claim 14, wherein the substantially distinct appearance of the indicating portion includes changing the displayed color to appear to flash.

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16.   The assistance system of claim 13, wherein the appearance of the indicating portion includes a displayed shape.

17.   The assistance system of claim 16, wherein the substantially distinct appearance of the indicating portion includes providing an animated displayed shape for the indicating portion.

18.   A computer-based assistance system for providing operational guidance of

5   commands to use a computer program, the assistance system comprising:

a search tool for searching through a plurality of records representing a host application to determine at least one assistance item key mapping a sequence corresponding to respective controls for implementing a particular command; and

a sequence processor, responsive to the at least one assistance item key, for

10   implementing the particular command.

19.   The computer-based assistance system of claim 18, wherein the sequence processor processes the plurality of assistance item keys in synchronization with user-driven events.

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20.   The computer-based assistance system of claim 18, wherein the at least one assistance item keys is fixed in a predetermined order.

21.   The computer-based assistance system of claim 18, wherein the at least one

20   assistance item key is dynamically generated in response to the user-driven events.

22.   The computer-based assistance system of claim 18, wherein the user selects the first search tool from a plurality of available search tools.

23. The computer-based assistance system of claim 18, further comprising:

a commentary generator, responsive to the processing of each control, for generating an available commentary to the user corresponding to the processing of the respective control.

24. The computer-based assistance system of claim 23, wherein the commentary generator generates visual messages as the commentary for output to the user through a display.

25. The computer-based assistance system of claim 24, wherein the commentary generator generates animation as the visual messages.

26. The computer-based assistance system of claim 23, wherein the commentary generator generates audio messages as the commentary for output to the user through a speaker.

27. A method for providing dynamic operational guidance of commands to use a computer program, the method comprising the steps of:

iteratively searching a Host Application Model to locate a target graphic user interface object (GuiObj) corresponding to a command to execute, and to locate a current location of a user in the Host Application Model;

determining a path through the Host Application Model from the target GuiObj to the current location of the user; and

generating a dynamic guide sequence record from the path for executing the command.

28. The method of claim 27, further comprising the steps of:

5   receiving user inputs corresponding to a selection of the target GuiObj associated with the command;

generating a GuiObj identifier (ID) corresponding to the selected target GuiObj; and

mapping the GuiObj ID to a GuiObj key;

10   wherein the step of iteratively searching a Host Application Model includes the step of:

searching the Host Application Model using the GuiObj key.

29. The method of claim 27, wherein the step of determining the path includes the step

15 of:

apply path finding techniques to the Host Application Model to find a best path through the Host Application Model.

30. The method of claim 29, wherein the step of applying path finding techniques is

20 performed in real-time to dynamically determine the best path and to execute the command in real-time.

31. The method of claim 27, further comprising the step of:

retrieving information objects (InfoObjs) based on a portion of the path; and

outputting the InfoObjs to the user.

32.   The method of claim 31, wherein the step of retrieving InfoObjs includes the step

5   of:

retrieving a predetermined detail level of the InfoObjs for output to the user.

33.   The method of claim 31, wherein the step of outputting the InfoObjs includes the

step of:

10   generating visual messages from the InfoObjs for output to the user through a

display.

34.   The method of claim 33, wherein the step of generating the visual messages

includes the step of:

15   generating animation as the visual messages.

35.   The method of claim 31, wherein the step of outputting the InfoObjs includes the

step of:

generating audio messages as the InfoObjs for output to the user through a speaker.

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